



Timber Volume in Indiana, 1986

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ABSTRACT.—Presents statistics on Indiana's growing-stock and sawtimber volumes by county for 1986. Includes map showing growing-stock volume distribution by county.

KEY WORDS: Growing stock, sawtimber, species, counties.

Indiana's 4.3 million acres of timberland¹ supported 5.2 billion cubic feet of growing-stock volume² in 1986. During the 19 years (1967-1986) between inventories conducted by the USDA Forest Service, volume of growing stock on timberland increased by 43 percent (1.6 billion cubic feet), while acres of timberland increased by only 10 percent. The average growing-stock volume per acre increased from 938 cubic feet in 1967 to 1,215 cubic feet in 1986.

The State's growing stock is mostly in hardwood species. Softwoods as a group accounted for only 4 percent of the growing-stock volume in 1986. Although modest on a Statewide basis, softwood growing stock increased significantly between inventories:

¹Forest land producing or capable of producing crops of individual wood and not withdrawn from timber utilization.

²Net volume in cubic feet of growing-stock trees 5 inches d.b.h. and larger from stump to a variable 4-inch top diameter.

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Species	Growing-stock volume		Change since 1967
	1967 ³	1986	
	(Thousand cubic feet)		(Percent)
Softwoods	83,142	201,262	142
Hardwoods	3,570,432	5,016,592	41
Total	3,653,574	5,217,854	43

Much of Indiana's timber volume is in two major species groups—oaks and hickories (table 1). Thirty percent of the State's growing-stock volume is in oak species. An additional 11 percent of the State's growing stock is in hickory species. Although the oak and hickory species comprise 41 percent of Indiana's growing-stock volume, they increased only modestly in volume during the 19 years between inventories. And, in the case of the species group identified as other white oaks, volume declined by 11 percent. It should be noted that many species in this group are, from a commercial standpoint, lower in quality and in value than the select white oaks. If all white oak species are grouped together, the "white oak group" experienced a 7.7 percent increase in volume. Other hardwood species increased greatly in growing-stock volume between inventories. The following tabulation compares hardwood growing-stock volume by species for both inventories:

³Figures have been adjusted from those published after the 1967 inventory to conform to 1986 volumes because of changes in inventory procedures and definitions.

Hardwood species group	Inventory year		Change since 1967
	1967 ³	1986	
	(Thousand cubic feet)		(Percent)
Select white oak	598,374	670,710	12
Other white oak	138,817	123,634	-11
Select red oak	265,208	291,878	10
Other red oak	442,432	497,322	12
Select hickory	234,007	274,705	17
Other hickory	247,510	299,253	21
Hard maple	274,830	454,732	65
Soft maple	120,640	243,760	102
Ash	196,646	359,677	83
Black walnut	83,589	127,229	52
Yellow-poplar	187,961	432,602	130
Other hardwoods	780,418	1,241,090	59
Total	3,570,432	5,016,592	

In Indiana, the Doyle log rule has long been used by those involved in buying and selling logs. For national inventory purposes, the International ¼-inch log rule is used. Therefore, to permit regional comparison and to allow for local usage of data, sawtimber volume by species group and county are presented in table 2 using the International ¼-inch rule and in table 3 using the locally applied Doyle rule. The sawtimer volumes presented in the text are International ¼-inch rule measurements.

The growing-stock volume of 5.2 million cubic feet also contains 19.2 billion board feet in sawtimber trees⁴. On a Statewide basis, total sawtimber volume increased by 54 percent between inventories. The average sawtimber volume per acre increased from 3,212 board feet in 1967 to 4,475 board feet in 1986. Sawtimber volume of some species groups increased greatly between inventories. As shown in the following tabulation, the sawtimber volumes for yellow-poplar, ash, and soft maple more than doubled between inventories:

Species group	Sawtimber volume		Change since 1967
	1967 ³	1986	
	(Thousand cubic feet)		(Percent)
Softwoods (combined)	210,660	616,513	193
Select white oak	2,255,688	2,875,793	27
Other white oak	514,562	533,134	4
Select red oak	1,088,064	1,316,182	21
Other red oak	1,800,589	2,163,418	20
Select hickory	699,687	939,742	34
Other hickory	716,406	1,003,171	40
Hard maple	805,803	1,413,239	75
Soft maple	395,028	809,358	105
Ash	544,904	1,174,946	116
Black walnut	242,027	427,405	77
Yellow-poplar	724,174	1,840,013	154
Other hardwoods	2,517,231	4,111,293	63
Total	12,514,823	19,224,207	54

Growing-stock volume is largely concentrated in the southern part of the State (fig. 1). The Knobs Unit in south-central Indiana contains 18 percent of the State's land area, but 45 percent of the State's growing-stock volume and 45 percent of the sawtimber volume. Perry County, in the Knobs Unit, has the most growing-stock and sawtimber volume of any county in the State (tables 2 and 3).

The south-central and southwestern parts of Indiana—the Knobs and Lower Wabash Units—contain two-thirds of the State's growing-stock volume. Although timber volume is concentrated in this area of the State, it has been increasing in much of the rest of Indiana. Between inventories, growing-stock volume in the Northern and Upland Flats Units, combined, increased by 63 percent (57 and 79 percent, respectively). At the same time, growing-stock volume in the Knobs and Lower Wabash Units, combined, increased by 34 percent (33 and 37 percent, respectively).

Statistics presented in this note are from a Statewide inventory conducted in 1985 and 1986 by the Forest Inventory and Analysis Project, North Central Forest Experiment Station, USDA Forest Service, in cooperation with the Indiana Department of Natural Resources. Funding provided by the Indiana State Legislature through the Forestry Division, Department of Natural Resources, increased the accuracy of the inventory.

Sampling error is estimated to be ± 1.57 percent for the total growing-stock volume in Indiana of 5.2 billion cubic feet. Sawtimber sampling error is estimated to be ± 1.86 percent for the State total of 19.2 billion board feet.

⁴Net volume of the saw log portion of live sawtimber trees (softwood 9 inches d.b.h. or larger and hardwood 11 inches and larger) from the stump to a point in the central stem at which utilization for sawn products is limited by large branches, forks, or other defects or by a top diameter outside bark of 7 inches for softwoods and 9 inches for hardwoods.

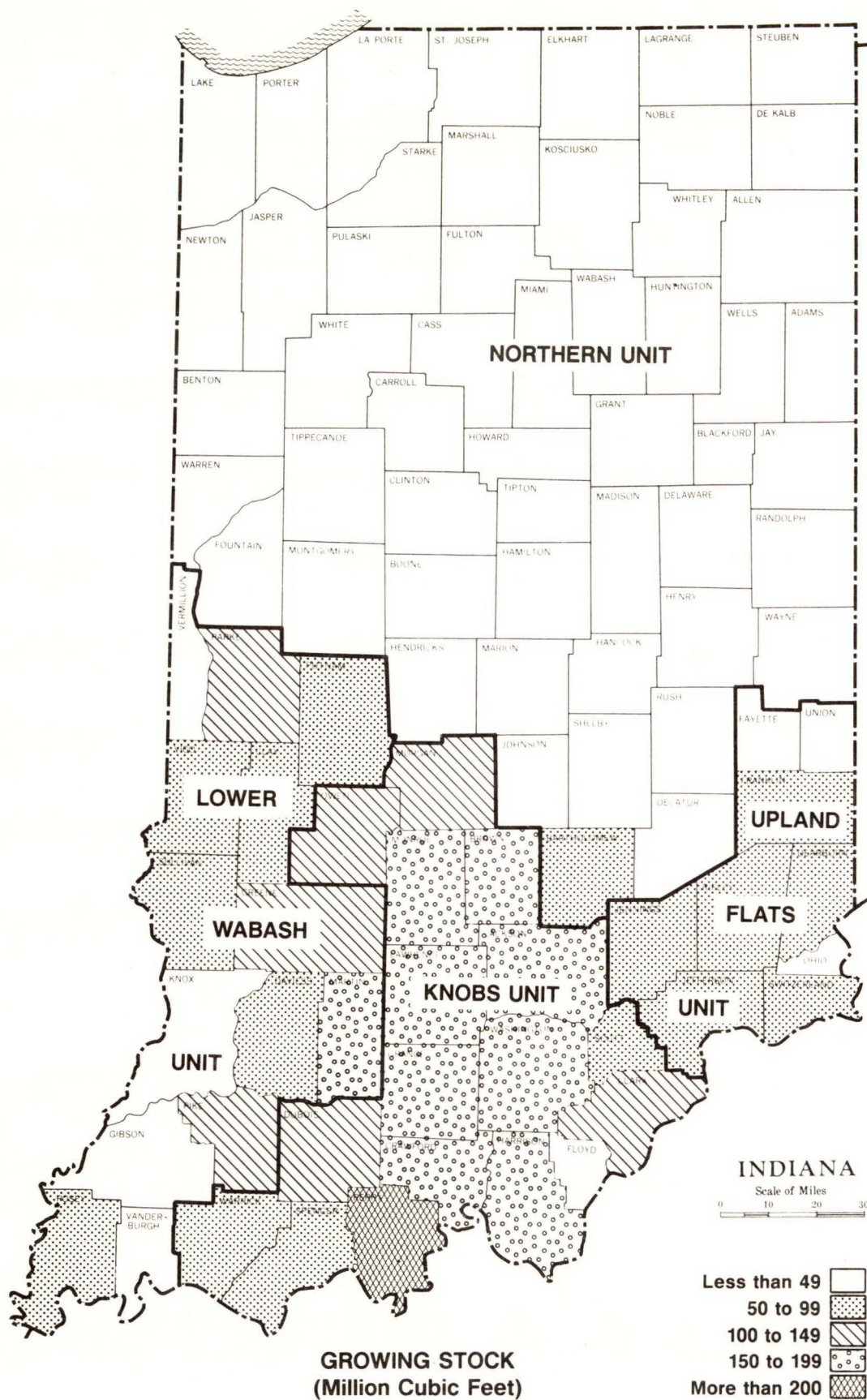


Figure 1.—Forest inventory units, and growing-stock volume by counties, 1986.

Table 1.--Net volume of growing stock on timberland by species group and county, Indiana, 1986

(In thousand cubic feet)

Survey Unit and County	Species group													
	All species	Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash	Black walnut	Yellow poplar	Other hardwoods	Softwoods
Lower Wabash Unit														
Clay	54,350	5,737	68	2,746	4,566	3,676	3,675	3,614	3,163	3,576	1,678	4,944	14,076	2,831
Daviess	51,379	5,879	158	2,819	5,960	2,978	3,322	2,999	4,154	3,097	1,361	4,765	12,568	1,319
Gibson	49,000	4,821	119	2,459	5,282	2,920	3,076	2,465	3,874	3,097	1,364	4,961	12,764	1,798
Greene	124,809	13,175	322	6,466	14,003	7,090	7,867	6,814	9,423	7,984	3,449	11,272	31,188	5,756
Knox	34,410	3,790	12	1,900	2,913	2,574	2,624	2,388	2,172	2,647	1,117	3,275	8,655	343
Martin	182,406	28,081	524	10,481	22,014	11,335	13,745	13,689	12,612	10,686	4,679	13,917	39,699	944
Parke	113,973	10,556	294	5,252	11,320	7,091	6,898	5,477	8,663	6,824	3,165	12,013	31,081	5,339
Pike	106,030	10,740	315	5,121	11,438	6,193	6,437	5,566	8,297	6,498	2,990	10,496	27,898	4,041
Posey	60,703	7,264	156	3,347	6,261	3,980	4,174	3,969	4,445	3,742	1,663	5,562	14,889	1,251
Putnam	98,882	11,829	13	5,463	6,758	8,060	7,778	8,287	4,736	7,568	3,609	9,110	25,145	526
Sullivan	81,544	8,799	248	4,121	9,084	4,664	5,079	4,505	6,526	4,999	2,245	7,469	20,677	3,128
Vanderburgh	29,304	3,059	19	1,549	2,589	2,105	2,100	1,766	1,851	2,224	893	2,955	7,521	673
Vermillion	41,650	5,080	84	2,375	4,545	2,611	2,958	2,788	3,047	3,015	1,219	3,470	9,808	650
Vigo	58,801	6,076	143	2,913	6,234	3,468	3,651	3,199	4,413	3,880	1,702	5,902	15,331	1,889
Total	1,087,241	124,886	2,475	57,012	112,967	68,745	73,384	67,526	77,376	69,837	31,134	100,111	271,300	30,488
Knobs Unit														
Brown	190,259	31,402	10,480	10,221	21,953	8,223	11,260	18,388	5,404	7,967	2,254	18,018	34,032	10,657
Clark	112,526	16,364	5,127	5,861	12,036	4,728	6,303	10,587	3,422	4,771	1,551	11,036	21,706	9,034
Crawford	157,423	26,095	8,272	8,990	17,434	6,742	9,501	15,366	4,286	7,000	2,091	15,774	29,104	6,768
Dubois	124,001	18,442	5,734	6,380	13,450	5,642	7,661	13,464	4,270	4,944	1,651	12,577	24,132	5,654
Floyd	47,433	5,607	1,830	2,014	4,925	2,546	3,216	5,588	1,882	2,145	636	5,108	10,018	1,918
Harrison	175,761	26,044	8,204	9,584	18,586	7,299	9,318	15,569	5,773	8,949	2,869	18,499	34,724	10,343
Jackson	159,454	25,816	9,230	8,209	18,160	6,574	9,104	13,254	5,105	8,036	2,427	15,875	29,934	7,730
Lawrence	180,706	31,303	9,944	10,128	20,884	8,160	11,673	19,345	5,348	7,238	2,056	17,064	32,533	5,030
Monroe	165,021	26,237	8,392	8,898	18,522	7,415	10,365	17,318	5,435	6,860	2,153	16,272	31,621	5,533
Morgan	109,257	16,580	5,197	6,081	11,664	4,811	5,912	10,090	3,482	5,529	1,804	11,536	21,539	5,032
Orange	176,616	29,495	9,574	9,936	19,287	7,493	9,986	15,995	4,931	8,803	2,413	17,721	31,461	9,521
Owen	140,177	16,270	5,284	5,943	14,471	7,092	9,224	16,171	5,107	6,445	2,017	15,141	30,203	6,809
Perry	213,369	38,183	13,199	11,543	24,528	9,102	12,809	17,982	4,982	9,153	2,107	20,207	33,581	15,993
Scott	55,632	8,568	2,602	3,002	5,943	2,374	3,017	5,247	1,880	2,602	845	5,619	10,774	3,159
Spencer	78,458	11,878	3,673	4,175	8,292	3,315	4,338	7,469	2,693	3,727	1,227	7,916	15,482	4,273
Warrick	95,835	12,871	3,903	4,623	9,559	3,938	4,758	8,369	3,681	5,479	1,814	10,428	20,118	6,294
Washington	159,816	17,526	5,761	6,329	16,052	8,392	10,687	18,377	6,199	7,276	2,135	17,212	33,901	9,969
Total	2,341,744	358,681	116,406	121,917	255,746	103,846	139,132	228,579	73,880	106,924	32,050	236,003	444,863	123,717
Upland Flats Unit														
Dearborn	86,497	9,761	211	5,426	6,290	4,112	5,842	6,951	4,338	8,063	3,148	8,669	21,222	2,464
Fayette	25,332	2,192	11	1,088	1,849	1,169	2,267	2,031	504	2,997	1,027	2,118	7,545	534
Franklin	61,558	5,605	15	2,779	4,280	2,757	5,279	5,400	1,077	7,718	2,803	5,437	16,514	1,894
Jefferson	85,451	10,563	66	4,787	3,972	3,028	4,081	8,956	2,563	8,120	2,715	8,158	20,223	8,219
Jennings	82,835	9,062	181	5,048	6,137	3,756	5,788	6,624	3,654	7,663	2,934	8,214	21,520	2,254
Ohio	25,277	2,835	53	1,516	1,811	1,196	1,763	2,060	1,155	2,466	972	2,460	6,261	729
Ripley	76,125	9,502	24	4,145	3,532	2,727	3,973	8,672	1,688	7,964	2,715	7,265	18,514	5,404
Switzerland	90,286	13,314	256	6,592	5,494	4,072	4,780	9,419	4,911	7,166	2,860	9,614	20,290	1,518
Union	15,853	1,381	13	738	1,115	709	1,282	1,311	411	1,902	670	1,431	4,416	474
Total	549,214	64,215	830	32,119	34,480	23,526	35,055	51,424	20,301	54,059	19,844	53,366	136,505	23,490

(Table 1 continued on next page)

(Table 1 continued)

Survey Unit and County	Species group													
	All species	Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash	Black walnut	Yellow- poplar	Other hardwoods	Softwoods
Northern Unit														
Adams	16,408	1,669	62	1,089	1,328	985	690	1,449	931	1,688	573	611	5,076	257
Allen	26,954	2,419	23	1,585	1,782	1,954	995	2,023	1,533	3,251	1,303	597	8,866	623
Bartholomew	53,422	5,664	222	3,630	4,336	3,146	2,250	5,186	2,871	5,612	1,976	2,009	15,982	538
Benton	1,938	188	7	117	129	118	96	177	94	202	78	70	629	33
Blackford	12,009	1,309	60	817	970	683	517	1,307	585	1,237	423	498	3,525	78
Boone	17,396	1,843	74	1,126	1,341	1,055	725	1,858	792	1,920	701	639	5,206	116
Carroll	21,031	2,147	81	1,372	1,607	1,297	876	2,129	1,077	2,211	766	776	6,405	287
Cass	26,154	2,436	68	1,735	2,055	1,658	1,082	1,907	1,808	2,573	842	882	8,414	694
Clinton	11,342	1,307	49	802	892	627	518	1,277	482	1,205	465	419	3,238	61
Decatur	30,582	3,455	138	2,119	2,406	1,782	1,356	3,206	1,415	3,228	1,162	1,190	8,890	235
De Kalb	29,326	2,723	73	1,889	2,200	1,897	1,227	2,008	2,030	2,833	894	1,008	9,683	861
Delaware	16,516	1,583	35	1,007	1,097	1,168	674	1,271	949	1,821	655	508	5,360	388
Elkhart	30,309	2,896	91	1,982	2,531	1,871	1,221	2,406	1,872	3,105	1,024	1,029	9,629	652
Fountain	41,490	3,975	122	2,729	3,181	2,617	1,746	3,120	2,748	4,022	1,276	1,497	13,377	1,080
Fulton	22,328	2,147	63	1,451	1,715	1,396	922	1,730	1,417	2,262	771	762	7,183	509
Grant	22,802	2,442	92	1,521	1,696	1,415	1,005	2,193	1,159	2,340	789	897	6,910	343
Hamilton	21,539	2,070	62	1,381	1,627	1,450	899	1,676	1,316	2,214	708	748	6,858	530
Hancock	12,774	1,181	30	807	880	864	541	974	828	1,253	400	439	4,191	386
Hendricks	19,187	1,922	69	1,278	1,571	1,118	780	1,868	1,080	2,039	747	656	5,849	210
Henry	22,631	2,224	75	1,474	1,686	1,442	941	2,132	1,304	2,342	803	792	7,014	402
Howard	8,030	782	9	425	421	625	299	723	298	1,077	458	174	2,623	116
Huntington	23,195	2,192	36	1,475	1,528	1,703	949	1,598	1,439	2,649	822	654	7,507	643
Jasper	28,446	2,752	87	1,876	2,355	1,754	1,152	2,325	1,745	2,983	1,032	945	8,915	525
Jay	30,777	3,396	150	2,125	2,544	1,697	1,332	3,296	1,502	3,173	1,113	1,251	9,014	184
Johnson	24,206	2,584	112	1,623	1,902	1,407	1,021	2,736	1,157	2,548	900	949	7,111	156
Kosciusko	41,899	4,539	199	2,863	3,424	2,361	1,793	4,414	2,099	4,328	1,508	1,688	12,373	310
La Grange	34,854	3,251	93	2,234	2,718	2,192	1,423	2,703	2,347	3,494	1,166	1,126	11,335	772
Lake	20,362	2,018	68	1,339	1,542	1,317	867	1,727	1,226	2,073	681	741	6,349	414
La Porte	44,163	4,366	154	2,941	3,754	2,691	1,804	3,719	2,663	4,578	1,525	1,552	13,678	738
Madison	15,891	1,691	61	1,079	1,235	944	693	1,526	832	1,653	594	589	4,787	207
Marion	466	14	--	23	5	27	14	184	--	51	30	--	118	--
Marshall	32,896	3,141	98	2,200	2,739	1,922	1,334	2,602	2,182	3,296	1,144	1,104	10,478	656
Miami	32,495	3,479	147	2,179	2,536	1,934	1,400	3,309	1,651	3,338	1,125	1,319	9,729	349
Montgomery	25,962	2,434	47	1,552	1,567	1,919	1,081	1,899	1,522	2,756	933	832	8,614	806
Newton	22,640	2,325	83	1,471	1,618	1,486	992	1,938	1,269	2,283	728	893	7,080	474
Noble	33,525	3,162	70	2,090	2,346	2,306	1,361	2,443	2,088	3,567	1,244	1,044	10,944	860
Porter	31,638	2,988	86	2,044	2,322	2,185	1,322	2,566	2,033	3,223	1,022	1,070	9,991	786
Pulaski	29,497	2,831	82	1,906	2,253	1,892	1,217	2,272	1,838	3,008	1,005	1,010	9,478	705
Randolph	25,180	2,911	114	1,789	1,995	1,413	1,143	2,789	1,103	2,633	973	971	7,178	168
Rush	11,146	992	10	641	666	815	419	994	582	1,340	546	250	3,642	249
St. Joseph	22,949	2,153	62	1,486	1,862	1,470	932	1,681	1,486	2,339	762	760	7,392	564
Shelby	15,851	1,686	72	1,050	1,208	940	693	1,643	786	1,614	544	649	4,785	181
Starke	30,066	2,968	101	1,977	2,346	1,876	1,245	2,669	1,758	3,062	1,018	1,086	9,374	586
Steuben	32,116	3,032	67	1,966	2,181	2,235	1,305	2,362	1,957	3,416	1,179	1,006	10,570	840
Tippecanoe	23,654	2,161	39	1,435	1,507	1,708	974	1,677	1,482	2,472	840	732	7,876	751
Tipton	4,204	371	5	233	219	314	163	451	189	503	206	99	1,361	90
Wabash	24,763	2,323	63	1,585	1,764	1,710	1,028	2,060	1,567	2,560	849	808	7,844	602
Warren	27,035	2,738	95	1,747	2,019	1,689	1,125	2,545	1,446	2,833	982	981	8,397	438
Wayne	33,800	3,229	97	2,265	2,716	2,072	1,396	2,698	2,255	3,363	1,133	1,140	10,693	743
Wells	17,862	1,727	42	1,099	1,171	1,274	753	1,321	1,054	1,891	637	598	5,820	475
White	12,425	1,105	22	771	904	843	509	842	845	1,288	446	362	4,136	352
Whitley	21,524	1,987	56	1,430	1,732	1,324	882	1,594	1,511	2,107	700	712	6,945	544
Total	1,239,655	122,928	3,923	80,830	94,129	78,588	51,682	107,203	72,203	128,857	44,201	43,122	388,422	23,567
All counties	5,217,854	670,710	123,634	291,878	497,322	274,705	299,253	454,732	243,760	359,677	127,229	432,602	1,241,090	201,262

Table 2.--Net volume of sawtimber on timberland by species group and county, Indiana, 1986

(In thousand board feet, International 1/4-inch rule)

Survey Unit and County	Species group													
	All species	Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash	Black walnut	Yellow- poplar	Other hardwoods	Soft- woods
Lower Wabash Unit														
Clay	201,560	25,694	168	12,827	19,721	12,918	13,135	10,940	11,436	11,180	5,395	21,156	46,469	10,521
Daviess	190,478	25,951	404	12,946	26,879	10,258	11,146	8,691	13,995	9,351	4,829	20,654	40,365	5,009
Gibson	176,850	20,792	282	11,242	23,274	9,497	10,248	6,964	12,748	9,076	4,950	21,107	39,718	6,952
Greene	452,848	57,686	810	29,639	62,613	23,666	26,403	20,060	31,713	22,754	11,764	48,534	95,446	21,760
Knox	125,878	16,905	27	8,881	12,282	8,820	9,553	7,467	7,734	8,119	3,309	13,522	28,110	1,149
Martin	707,052	126,304	1,438	48,870	102,268	42,374	47,020	41,120	47,085	34,571	14,561	62,312	136,961	2,168
Parke	413,849	44,932	672	24,031	49,461	22,861	22,869	15,104	28,968	20,237	12,048	52,397	98,847	21,422
Pike	384,936	46,632	766	23,310	50,754	20,684	21,208	15,655	27,624	18,348	10,919	45,743	87,215	16,078
Posey	229,581	32,383	399	15,568	28,028	13,990	14,498	11,871	15,646	12,000	5,657	24,409	50,238	4,894
Putnam	374,028	53,951	34	25,878	27,777	28,937	29,362	25,973	19,269	24,564	10,580	39,270	86,962	1,471
Sullivan	298,467	38,632	621	18,946	40,848	15,892	16,917	13,040	21,596	14,100	7,928	32,667	64,986	12,294
Vanderburgh	106,337	13,397	38	7,136	10,862	6,850	7,512	5,401	6,671	6,913	2,824	12,359	23,831	2,543
Vermillion	153,001	22,755	224	10,978	20,261	9,084	10,400	8,666	10,597	8,658	3,641	14,839	30,543	2,355
Vigo	211,903	26,664	350	13,160	27,329	11,638	12,159	9,100	14,742	11,176	5,969	24,954	47,406	7,256
Total	4,026,768	552,678	6,233	263,412	502,357	237,469	252,430	200,052	269,824	211,047	104,374	433,923	877,097	115,872
Knobs Unit														
Brown	714,793	132,252	45,935	44,595	95,782	29,197	38,955	52,898	15,908	23,942	7,875	76,377	114,844	36,233
Clark	420,750	69,064	22,119	25,244	53,095	16,945	21,759	30,164	10,065	16,119	5,154	45,685	72,588	32,749
Crawford	582,098	109,435	35,409	38,643	76,449	23,937	31,576	43,548	12,424	22,300	7,066	66,240	94,759	20,312
Dubois	470,282	78,886	25,411	28,292	59,530	19,862	27,228	39,567	12,905	15,482	5,699	52,890	84,146	20,384
Floyd	180,034	24,627	8,318	8,959	21,479	8,701	11,131	16,409	6,729	6,261	2,232	22,148	35,915	7,125
Harrison	641,916	108,389	34,475	41,002	81,745	25,593	31,976	43,327	15,181	30,518	9,718	78,130	108,832	33,030
Jackson	575,103	107,410	39,704	34,849	77,055	22,910	29,382	36,646	12,670	26,341	8,831	67,242	91,629	20,434
Lawrence	687,495	132,711	43,733	44,592	92,348	28,939	40,452	56,903	16,558	20,830	7,399	72,771	113,316	16,943
Monroe	618,137	111,372	37,089	38,954	81,590	25,813	35,455	50,444	15,496	21,087	7,714	69,250	107,011	16,862
Morgan	401,468	69,546	21,817	25,838	51,009	16,752	20,221	28,076	10,262	19,116	5,834	47,831	70,056	15,110
Orange	648,722	122,876	40,308	42,376	83,781	27,060	33,522	45,388	13,531	28,034	8,412	75,270	99,987	28,177
Owen	528,332	71,241	23,920	26,222	62,639	24,112	31,874	46,719	16,979	19,377	7,034	65,477	107,298	25,440
Perry	778,940	158,634	56,432	49,735	104,904	33,551	41,409	49,765	13,506	26,216	7,323	85,083	104,298	48,084
Scott	205,427	36,064	11,143	12,978	26,190	8,328	10,528	14,968	5,000	8,570	2,903	23,339	35,158	10,258
Spencer	291,161	50,147	15,771	18,051	36,351	11,657	15,273	21,344	7,222	12,360	4,261	33,161	50,961	14,602
Warrick	340,965	54,117	16,468	19,582	41,150	13,471	15,890	23,054	8,617	18,180	6,401	42,944	62,740	18,351
Washington	603,222	76,913	26,292	28,160	69,783	28,767	36,759	53,661	20,974	21,225	7,445	74,822	119,529	38,892
Total	8,688,845	1,513,684	504,344	528,072	1,114,880	365,595	473,390	652,881	214,027	335,958	111,301	998,660	1,473,067	402,986
Upland Flats Unit														
Dearborn	300,737	39,884	711	25,694	28,312	12,759	18,129	20,686	15,224	23,195	7,635	38,342	66,626	3,540
Fayette	81,280	7,100	36	5,131	7,618	3,467	7,168	5,248	1,630	8,613	2,253	8,789	23,027	1,200
Franklin	199,848	20,274	51	13,299	17,162	8,259	17,698	14,283	3,383	23,352	5,717	22,573	49,770	4,027
Jefferson	305,240	45,345	228	22,670	17,636	10,656	14,073	24,809	8,398	28,094	7,556	30,893	74,860	20,022
Jennings	288,264	35,643	610	23,841	27,575	12,297	17,975	19,018	13,472	22,552	7,195	36,119	68,188	3,779
Ohio	86,903	11,417	178	7,186	8,068	3,641	5,524	6,047	3,957	7,172	2,252	10,812	19,562	1,087
Ripley	271,884	41,256	85	19,680	14,939	9,648	14,247	23,685	5,400	27,613	7,267	27,891	67,111	13,062
Switzerland	341,015	58,627	864	30,999	25,860	14,423	15,391	28,343	18,277	23,711	8,213	42,272	72,373	1,662
Union	51,370	5,132	42	3,529	4,545	2,101	4,181	3,541	1,316	5,405	1,447	5,954	13,222	955
Total	1,926,541	264,678	2,805	152,029	151,715	77,251	114,386	145,660	71,057	169,707	49,535	223,645	454,739	49,334

(Table 2 continued on next page)

(Table 2 continued)

Survey Unit and County	Species group													
	All species	Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash	Black walnut	Yellow- poplar	Other hardwoods	Soft- woods
Northern Unit														
Adams	61,593	7,423	315	5,095	5,688	3,244	2,206	5,474	3,359	5,981	2,119	2,625	17,522	542
Allen	96,699	10,581	64	6,775	7,085	6,793	3,276	8,241	5,825	11,876	4,577	2,487	27,801	1,318
Bartholomew	203,754	25,404	1,125	17,067	19,340	10,318	6,950	19,866	10,274	20,227	7,418	8,632	55,987	1,146
Benton	7,241	830	34	550	544	385	335	658	325	738	277	301	2,197	67
Blackford	46,569	5,877	307	3,904	4,431	2,197	1,608	5,019	2,072	4,463	1,617	2,148	12,755	171
Boone	66,503	8,291	367	5,313	5,987	3,475	2,258	7,257	2,742	6,992	2,598	2,738	18,234	251
Carroll	79,198	9,559	409	6,385	6,936	4,244	2,739	8,359	3,786	7,904	2,838	3,326	22,113	600
Cass	94,732	10,665	345	7,825	8,312	5,484	3,487	7,288	6,521	8,899	3,032	3,760	27,695	1,419
Clinton	44,083	5,951	251	3,813	4,081	2,015	1,459	5,011	1,750	4,446	1,793	1,803	11,569	141
Decatur	118,120	15,626	697	10,156	10,900	5,766	3,966	12,315	4,976	11,828	4,494	5,119	31,768	509
De Kalb	105,108	11,892	372	8,598	8,663	6,244	3,981	7,573	7,172	9,749	3,220	4,279	31,623	1,742
Delaware	59,820	6,960	165	4,580	4,418	3,929	2,172	4,924	3,287	6,605	2,374	2,134	17,487	785
Elkhart	110,484	12,813	466	9,085	10,185	6,233	3,891	9,215	6,647	10,691	3,660	4,394	31,855	1,349
Fountain	151,318	17,418	627	12,511	12,949	8,581	5,634	11,774	9,877	13,948	4,685	6,398	44,704	2,212
Fulton	81,940	9,436	317	6,610	7,098	4,631	3,003	6,586	5,211	7,949	2,799	3,260	23,982	1,058
Grant	86,318	10,896	473	7,240	7,382	4,585	3,082	8,354	4,006	8,457	3,030	3,843	24,263	707
Hamilton	77,697	9,131	312	6,397	6,413	4,798	2,819	6,406	4,329	7,743	2,577	3,156	22,564	1,052
Hancock	45,787	5,139	154	3,653	3,427	2,831	1,745	3,788	2,879	4,364	1,454	1,858	13,718	777
Hendricks	72,388	8,598	349	5,846	6,904	3,702	2,464	7,347	3,966	7,268	2,704	2,815	19,971	454
Henry	83,665	9,865	377	6,758	7,119	4,720	2,930	8,440	4,466	8,314	2,938	3,367	23,562	809
Howard	29,480	3,458	22	1,870	1,757	2,186	988	2,941	1,119	4,106	1,644	719	8,417	253
Huntington	83,370	9,451	168	6,685	5,943	5,760	3,215	6,299	5,140	9,895	2,942	2,746	23,817	1,309
Jasper	104,622	12,218	436	8,578	9,755	5,866	3,662	8,928	6,229	10,457	3,705	4,033	29,667	1,088
Jay	119,725	15,302	772	10,144	11,655	5,472	4,088	12,623	5,494	11,459	4,258	5,416	32,618	424
Johnson	93,398	11,607	571	7,643	8,661	4,548	3,143	10,767	4,088	9,209	3,391	4,087	25,342	341
Kosciusko	162,276	20,376	1,014	13,591	15,592	7,644	5,586	16,926	7,686	15,605	5,737	7,295	44,525	699
La Grange	124,862	14,431	479	10,168	10,919	7,219	4,458	10,616	7,819	12,053	4,088	4,739	36,363	1,510
Lake	74,951	8,937	347	6,223	6,419	4,318	2,715	6,605	4,134	7,346	2,517	3,147	21,417	826
La Porte	162,766	19,478	787	13,664	15,567	8,928	5,628	14,201	9,122	15,954	5,511	6,606	45,820	1,500
Madison	60,440	7,571	310	5,062	5,452	3,081	2,129	5,854	3,030	5,985	2,242	2,531	16,751	442
Marion	1,675	57	--	32	21	71	30	915	--	166	87	--	296	--
Marshall	121,437	13,881	499	9,939	11,542	6,381	4,335	9,979	8,210	11,449	4,093	4,749	34,992	1,388
Miami	124,540	15,547	756	10,376	11,345	6,255	4,377	12,642	5,817	12,028	4,293	5,676	34,693	735
Montgomery	92,788	10,552	222	7,030	5,973	6,394	3,515	7,350	5,274	9,918	3,430	3,494	28,009	1,627
Newton	84,216	10,265	424	6,974	6,808	4,838	3,150	7,239	4,310	8,186	2,780	3,805	24,481	956
Noble	120,885	13,855	339	9,441	9,379	7,734	4,391	9,414	7,386	12,730	4,494	4,403	35,569	1,750
Porter	112,945	13,205	439	9,380	9,122	7,172	4,015	10,108	6,314	11,267	3,696	4,467	32,257	1,503
Pulaski	107,732	12,441	413	8,711	9,161	6,283	3,932	8,645	6,635	10,549	3,656	4,311	31,537	1,458
Randolph	97,813	13,224	584	8,564	9,093	4,525	3,217	10,857	3,941	9,665	3,795	4,191	25,783	374
Rush	40,171	4,329	30	2,706	2,666	2,799	1,371	4,177	2,203	4,923	1,921	1,044	11,477	525
St. Joseph	82,525	9,498	312	6,796	7,334	4,902	2,967	6,401	5,130	8,051	2,705	3,220	24,069	1,140
Shelby	60,697	7,527	369	5,002	5,383	3,026	2,188	6,300	2,769	5,809	2,073	2,791	17,080	380
Starke	111,362	13,126	517	9,117	9,798	6,163	3,932	10,339	6,251	10,758	3,743	4,647	31,759	1,212
Steuben	115,318	13,286	322	8,919	8,603	7,479	4,198	9,151	6,790	12,182	4,261	4,229	34,202	1,696
Tippecanoe	84,092	9,364	186	6,418	5,728	5,701	3,170	6,544	5,209	8,795	3,036	3,077	25,344	1,520
Tipton	15,186	1,622	17	980	868	1,057	526	1,942	682	1,857	725	411	4,313	186
Wabash	88,725	10,247	315	7,197	7,009	5,632	3,156	8,203	5,014	9,022	3,055	3,379	25,329	1,167
Warren	101,332	12,142	480	8,103	8,663	5,556	3,572	9,883	5,213	10,140	3,645	4,204	28,813	918
Wayne	123,515	14,275	499	10,271	11,247	6,825	4,391	10,464	8,051	11,687	4,084	4,860	35,344	1,517
Wells	64,464	7,558	205	5,068	4,636	4,238	2,422	5,005	3,561	6,809	2,349	2,516	19,145	952
White	43,779	4,842	106	3,437	3,460	2,825	1,649	3,284	2,875	4,494	1,548	1,512	13,046	701
Whitley	77,949	8,726	286	6,419	7,045	4,374	2,844	6,149	5,484	7,238	2,487	3,037	22,745	1,115
Total	4,582,053	544,753	19,752	372,669	394,466	259,427	162,965	414,646	254,450	458,234	162,195	183,785	1,306,390	48,321
All counties	19,224,207	2,875,793	533,134	1,316,182	2,163,418	939,742	1,003,171	1,413,239	809,358	1,174,946	427,405	1,840,013	4,111,293	616,513

Table 3.--Net volume of sawtimber on timberland by species group and county, Indiana, 1986

(In thousand board feet, Doyle rule)

Survey Unit and County	All species	Species group										Black walnut	Yellow- poplar	Other hardwoods	Soft- woods
		Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash					
Lower Wabash Unit															
Clay	127,550	17,594	92	8,794	13,636	7,301	7,674	6,112	7,566	6,688	2,990	14,191	29,392	5,520	
Daviess	121,877	17,390	219	9,052	18,286	5,712	6,341	5,073	9,044	5,534	2,738	13,845	26,036	2,607	
Gibson	112,629	13,977	156	7,773	15,907	5,191	5,864	4,036	8,371	5,361	2,812	14,109	25,450	3,622	
Greene	287,813	38,725	441	20,480	42,434	13,096	15,171	11,692	20,904	13,530	6,643	32,448	60,892	11,357	
Knox	80,594	11,721	15	6,002	8,577	4,996	5,734	4,124	5,181	4,934	1,811	8,962	17,971	566	
Martin	454,568	84,820	763	34,175	68,744	24,563	27,408	23,539	30,510	20,637	8,125	41,911	88,316	1,057	
Parke	262,314	30,087	377	16,739	33,706	12,364	12,883	8,684	19,105	11,693	6,967	35,315	63,167	11,227	
Pike	244,794	31,165	422	16,338	34,509	11,333	11,935	9,098	18,027	10,700	6,262	30,741	55,842	8,422	
Posey	146,824	21,851	216	10,857	19,130	7,856	8,329	6,773	10,146	7,083	3,205	16,451	32,374	2,553	
Putnam	239,087	37,467	18	17,598	19,385	16,583	17,553	14,243	13,016	14,784	5,790	26,442	55,487	721	
Sullivan	190,131	25,863	339	13,292	27,800	8,781	9,592	7,602	13,953	8,261	4,522	21,986	41,700	6,440	
Vanderburgh	67,756	9,181	22	4,795	7,424	3,816	4,484	3,004	4,604	4,161	1,580	8,200	15,189	1,296	
Vermillion	98,070	15,440	120	7,556	13,767	5,151	6,141	4,956	6,994	5,231	2,021	9,869	19,627	1,197	
Vigo	134,863	17,892	193	9,122	18,664	6,440	6,944	5,238	9,703	6,645	3,373	16,599	30,271	3,779	
Total	2,568,870	373,173	3,393	182,573	341,969	133,183	146,053	114,174	177,124	125,242	58,839	291,069	561,714	60,364	
Knobs Unit															
Brown	442,447	84,504	27,425	30,384	61,786	16,655	22,402	30,598	10,026	13,996	4,364	48,973	73,476	17,858	
Clark	258,143	43,945	13,239	17,087	34,453	9,565	12,687	17,273	6,326	9,512	2,847	29,015	45,988	16,206	
Crawford	360,032	69,540	20,987	26,325	49,735	13,584	18,210	25,098	7,850	13,119	3,885	42,094	60,049	9,556	
Dubois	293,472	50,600	15,280	19,287	38,757	11,291	15,808	22,879	8,075	9,171	3,193	33,901	54,631	10,599	
Floyd	112,524	16,074	4,872	6,130	13,750	4,944	6,461	9,522	4,185	3,722	1,254	14,240	23,732	3,638	
Harrison	394,447	68,219	20,391	27,733	53,078	14,320	18,778	24,672	9,702	18,168	5,186	49,411	68,201	16,588	
Jackson	353,066	68,046	23,352	23,718	49,331	12,906	16,841	21,037	8,085	15,675	4,700	42,351	57,494	9,530	
Lawrence	429,818	85,031	26,192	30,537	60,081	16,444	23,241	33,115	10,423	12,262	4,156	46,657	73,321	8,358	
Monroe	386,461	71,471	22,207	26,654	53,092	14,642	20,488	29,231	9,754	12,445	4,267	44,502	68,945	8,763	
Morgan	247,002	43,975	12,890	17,390	33,070	9,369	11,891	15,900	6,494	11,414	3,150	30,079	44,119	7,261	
Orange	398,172	77,532	23,667	28,694	54,284	15,353	19,192	26,234	8,607	16,594	4,546	47,716	62,875	12,878	
Owen	329,230	46,328	14,058	17,827	40,343	13,646	18,531	26,923	10,545	11,382	3,950	42,045	70,415	13,237	
Perry	476,502	100,282	33,099	34,001	67,271	19,514	23,252	28,935	8,526	15,294	4,029	54,215	65,879	22,205	
Scott	126,825	22,911	6,675	8,788	17,056	4,675	6,143	8,558	3,164	5,096	1,578	14,768	22,291	5,122	
Spencer	180,014	31,850	9,449	12,217	23,710	6,550	8,930	12,195	4,566	7,402	2,324	20,977	32,412	7,432	
Warrick	208,653	34,297	9,757	13,145	26,699	7,491	9,288	13,024	5,459	10,835	3,408	26,788	39,518	8,944	
Washington	375,133	50,150	15,330	19,253	44,621	16,314	21,363	31,093	13,038	12,597	4,187	48,247	78,800	20,140	
Total	5,371,941	964,755	298,870	359,170	721,117	207,263	273,506	376,287	134,825	198,684	61,024	635,979	942,146	198,315	
Upland Flats Unit															
Dearborn	194,678	27,673	373	18,295	19,413	7,695	10,760	12,168	9,354	13,813	3,806	27,645	42,031	1,652	
Fayette	51,604	4,804	19	3,478	5,232	2,003	4,223	3,097	978	5,104	1,162	6,389	14,447	668	
Franklin	127,007	13,948	27	9,186	12,036	4,943	10,497	8,260	2,023	13,956	2,980	15,813	31,273	2,065	
Jefferson	195,957	31,288	120	17,168	12,490	6,668	7,962	14,243	5,198	17,068	4,107	20,373	49,650	9,622	
Jennings	186,173	24,621	320	16,872	18,871	7,346	10,597	11,319	8,282	13,433	3,600	26,127	43,007	1,778	
Ohio	56,130	7,925	93	5,106	5,551	2,190	3,263	3,526	2,428	4,276	1,132	7,772	12,353	515	
Ripley	175,157	28,463	44	15,039	10,782	6,097	8,125	13,577	3,368	16,862	4,004	17,957	44,458	6,381	
Switzerland	223,660	40,931	453	23,229	17,623	8,946	8,807	16,558	11,409	14,512	4,218	29,419	46,688	867	
Union	32,775	3,514	22	2,436	3,168	1,257	2,502	2,097	793	3,206	746	4,220	8,322	492	
Total	1,243,141	183,167	1,471	110,809	105,166	47,145	66,736	84,845	43,833	102,230	25,755	155,715	292,229	24,040	

(Table 3 continued on next page)

(Table 3 continued)

Survey Unit and County	Species group													
	All species	Select white oak	Other white oak	Select red oak	Other red oak	Select hickory	Other hickory	Hard maple	Soft maple	Ash	Black walnut	Yellow- poplar	Other hardwoods	Soft- woods
Northern Unit														
Adams	40,904	5,378	196	3,659	3,906	1,940	1,244	3,692	2,338	3,742	1,233	1,745	11,604	227
Allen	64,292	7,393	46	5,043	4,666	4,072	1,994	5,807	3,988	7,631	2,796	1,747	18,537	572
Bartholomew	136,717	18,569	693	12,420	13,417	6,235	3,957	13,540	7,306	12,714	4,340	5,760	37,268	498
Benton	4,748	597	22	385	381	231	185	449	220	461	162	199	1,428	28
Blackford	31,309	4,334	188	2,799	3,113	1,329	906	3,448	1,490	2,794	931	1,426	8,477	74
Boone	44,792	6,083	225	3,849	4,172	2,104	1,304	5,035	1,973	4,425	1,521	1,837	12,151	113
Carroll	52,883	6,947	254	4,559	4,804	2,550	1,556	5,826	2,637	4,972	1,657	2,215	14,654	252
Cass	62,082	7,497	219	5,594	5,594	3,272	1,944	4,936	4,391	5,524	1,767	2,489	18,271	584
Clinton	30,032	4,442	153	2,827	2,903	1,218	833	3,473	1,268	2,853	1,099	1,204	7,696	63
Decatur	79,710	11,554	428	7,414	7,699	3,478	2,262	8,388	3,554	7,509	2,691	3,411	21,100	222
De Kalb	68,424	8,259	240	6,059	5,844	3,712	2,223	5,025	4,736	6,040	1,863	2,822	20,889	712
Delaware	39,350	4,877	106	3,280	2,999	2,354	1,267	3,341	2,189	4,179	1,414	1,414	11,573	331
Elkhart	72,901	9,175	292	6,529	6,839	3,706	2,189	6,267	4,543	6,683	2,132	2,918	21,074	554
Fountain	99,048	12,277	398	8,835	8,811	5,104	3,143	7,869	6,614	8,651	4,222	29,505	906	
Fulton	54,000	6,688	200	4,732	4,823	2,761	1,700	4,435	3,544	4,972	1,640	2,169	15,896	440
Grant	57,397	7,922	294	5,153	5,181	2,746	1,740	5,656	2,748	5,319	1,784	2,549	16,012	293
Hamilton	50,835	6,450	198	4,530	4,333	2,864	1,583	4,335	2,863	4,829	1,498	2,091	14,831	430
Hancock	29,785	3,566	100	2,540	2,330	1,684	976	2,594	1,874	2,715	848	1,226	9,015	317
Hendricks	48,662	6,254	215	4,284	4,734	2,242	1,406	5,128	2,825	4,573	1,582	1,885	13,337	197
Henry	55,577	7,054	235	4,831	4,895	2,848	1,658	5,904	3,045	5,207	1,711	2,239	15,612	338
Howard	19,805	2,449	15	1,391	1,195	1,315	632	2,065	778	2,674	1,011	520	5,642	118
Huntington	54,194	6,494	110	4,777	3,965	3,345	1,842	4,240	3,403	6,108	1,754	1,845	15,765	546
Jasper	69,393	8,773	272	6,240	6,576	3,514	2,074	6,096	4,313	6,552	2,169	2,693	19,666	455
Jay	80,760	11,327	473	7,347	8,187	3,306	2,311	8,627	3,978	7,207	2,484	3,601	21,725	187
Johnson	63,001	8,544	350	5,499	6,076	2,762	1,786	7,537	2,941	5,792	1,965	2,722	16,876	151
Kosciusko	109,167	15,025	622	9,806	10,916	4,613	3,159	11,592	5,533	9,794	3,332	4,852	29,619	304
La Grange	82,354	10,074	303	7,324	7,365	4,364	2,514	7,286	5,236	7,493	2,345	3,138	24,290	622
Lake	49,393	6,368	217	4,431	4,399	2,594	1,523	4,489	2,789	4,576	1,459	2,086	14,121	341
La Porte	108,000	14,044	488	9,907	10,532	5,359	3,165	9,651	6,316	9,959	3,190	4,391	30,377	621
Madison	40,464	5,534	193	3,675	3,803	1,851	1,207	3,992	2,125	3,781	1,335	1,686	11,095	187
Marion	1,263	46	--	14	21	48	15	756	--	112	53	--	198	--
Marshall	80,571	9,912	313	7,221	7,807	3,818	2,444	6,783	5,691	7,145	2,388	3,160	23,309	580
Miami	83,209	11,364	466	7,397	7,947	3,767	2,471	8,620	4,094	7,529	2,480	3,768	22,996	310
Montgomery	60,263	7,283	147	4,880	4,064	3,799	2,029	4,970	3,383	6,258	2,047	2,337	18,393	673
Newton	55,270	7,330	266	4,881	4,737	2,889	1,769	4,815	2,876	5,102	1,611	2,516	16,086	392
Noble	79,331	9,675	218	6,758	6,327	4,623	2,535	6,352	4,924	8,016	2,666	2,954	23,553	730
Porter	73,962	9,231	279	6,660	6,167	4,329	2,243	7,009	4,123	6,996	2,131	2,952	21,228	614
Pulaski	70,805	8,817	261	6,205	6,207	3,738	2,224	5,822	4,481	6,600	2,144	2,866	20,837	603
Randolph	66,399	9,856	358	6,295	6,466	2,729	1,830	7,475	2,831	6,174	2,310	2,790	17,122	163
Rush	26,796	3,027	22	1,983	1,782	1,682	832	3,031	1,497	3,168	1,173	730	7,641	228
St. Joseph	54,133	6,716	198	4,872	4,900	2,920	1,666	4,316	3,450	5,019	1,574	2,136	15,899	467
Shelby	40,492	5,497	228	3,540	3,784	1,819	1,230	4,314	1,937	3,635	1,196	1,849	11,303	160
Starke	73,718	9,427	323	6,493	6,705	3,684	2,215	7,110	4,273	6,727	2,179	3,084	20,996	502
Steuben	75,576	9,243	207	6,341	5,818	4,469	2,431	6,179	4,480	7,676	2,520	2,833	22,672	707
Tippecanoe	54,649	6,442	125	4,490	3,857	3,389	1,820	4,458	3,372	5,534	1,809	2,055	16,671	627
Tipton	10,151	1,137	12	698	593	637	316	1,442	453	1,197	442	285	2,859	80
Wabash	58,270	7,160	200	5,124	4,746	3,402	1,777	5,738	3,296	5,627	1,777	2,243	16,699	481
Warren	67,412	8,759	299	5,779	5,990	3,328	2,041	6,799	3,599	6,382	2,135	2,803	19,112	386
Wayne	81,661	10,131	314	7,422	7,620	4,098	2,460	7,171	5,487	7,279	2,383	3,221	23,448	627
Wells	42,053	5,272	132	3,567	3,165	2,530	1,390	3,331	2,323	4,280	1,388	1,679	12,602	394
White	28,578	3,333	70	2,468	2,295	1,693	935	2,244	1,895	2,809	909	1,008	8,630	289
Whitley	51,259	6,136	182	4,616	4,736	2,616	1,586	4,195	3,715	4,491	1,445	2,011	15,070	460
Total	3,035,800	389,742	12,365	267,423	270,192	155,480	92,542	283,653	173,738	287,485	95,186	122,408	865,430	20,156
All counties	12,219,752	1,910,837	316,099	919,975	1,438,444	543,071	578,837	858,959	529,520	713,641	240,804	1,205,171	2,661,519	302,875